Blendtec

operations manual

for the:
ABC
Smoother
and SpaceSaver

BRAWN. BRAINS. BLENDTEC.™

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SECTION 1 – IMPORTANT SAFEGUARDS

READ ALL INSTRUCTIONS CAREFULLY BEFORE USING YOUR BLENDTEC MACHINE.

1.1 SAFETY CERTIFICATION

The ABC, Smoother, and SpaceSaver blenders and accessories are certified by ETL to UL standard 763, by CSA standard C22.2 No. 195-m1987, and to CE Standards.

1.2 HEALTH CERTIFICATION

The ABC, Smoother, and SpaceSaver blenders and accessories are certified by NSF International.

1.3 AVOID CONTACT WITH MOVING PARTS

● Keep fingers, hands, hair and clothing away from all moving parts.
● Keep all utensils away from the drive socket and blender blades during operation. Metal utensils will damage blades.
● **NEVER** put hands into blender jar or add substances by hand when blender is operating.
● **NEVER** place jar into drive socket if blender motor is operating.
● Do not rock the blender when it is operating. Keep the blender jar straight up until the operation is complete.
● These precautions will prevent personal injury and/or damage to the blender.

1.4 POWER CORD PRECAUTIONS

● Do not operate with a damaged cord or plug.
● If the supply cord is damaged, it must be replaced by the manufacturer or its service agent in order to avoid a hazard.
● Do not let the cord hang over the edge of the work surface.
● Never use an extension cord with the unit.
● Unplug the blender motor before removing from sound enclosure, changing blender locations, or cleaning.

1.5 NEVER ATTEMPT TO REPAIR THE POWER UNIT

Never remove the blender base cover. The blender base does not contain self-adjustable or serviceable parts. All service and adjustments must be made by a
qualified service agent. **Removing the cover or attempting to service the blender will void the warranty.**

1.6 TURN THE UNIT OFF WHEN NOT IN USE

1.7 THE 110/120 VOLT RECEPTACLE FOR EACH POWER UNIT MUST BE PROTECTED BY A SEPARATE 20 AMP CIRCUIT BREAKER OR FUSE. **THE 220/240 VOLT RECEPTACLE** FOR EACH POWER UNIT MUST BE PROTECTED BY A SEPARATE 13 AMP CIRCUIT BREAKER OR FUSE.

Do not use any other electrical equipment on the same circuit as the blender or you risk overloading the circuit and either damaging the blender electronics or blowing the circuit protection.

1.8 NEVER OPERATE IF THE UNIT APPEARS DAMAGED
If the blender malfunctions call the service agent first. If it is dropped or damaged in any way, return the blender to a Blendtec service agent immediately for examination, repair, electrical or mechanical adjustment, or possible replacement.

1.9 NEVER OPERATE IN LIQUID
Do not operate the blender motor in water or any other liquid. Avoid any contact between the motor and water. Deliberate use of machine outdoors in conditions where precipitation is present will void the warranty.

1.10 NEVER PUT ITEMS SUCH AS METAL, ROCKS, OR OTHER HARD MATERIALS INTO BLENDER JAR
Metal utensils and other hard materials are dangerous. They can cause injury or damage. Damage caused by such foreign objects will void the warranty.

1.11 NEVER OPERATE USING ATTACHMENTS NOT SOLD BY BLENDTEC
The use of unauthorized attachments voids the warranty and may cause fire, electric shock, or injury.

1.12 ALWAYS SECURE THE BLENDER LID BEFORE STARTING THE MACHINE
Even if you have a sound enclosure, make sure you place a lid on the blender jar before you close the cover.

1.13 AVOID TOUCHING THE METAL BASE AFTER EXTENSIVE USE
The metal base of the blender may become hot after numerous cycles.

1.14 BLADES ARE SHARP! HANDLE CAREFULLY

1.15 When blending HOT LIQUIDS, remove center plug of lid.

SAVE THESE INSTRUCTIONS

SECTION 2: COMPONENT OVERVIEW

2.1 BLENDER MOTOR
The blender motor consists of the blender base shell, touch pad control, Liquid Crystal Display (LCD) information center, and the power unit. (See Figures 1.1 and 1.2)

● Motor housing: Houses the power unit in a surgical stainless steel casing. Never remove the motor cover. Removal of the motor cover will void the warranty.

● Touch Pad: Consists of six buttons which contain pre-programmed settings as well as a pulse for selective blender control.

● LCD Information Center: When a cycle is completed, the display increments the cumulative cycle for warranty purposes. It also indicates overload or over-temperature conditions.

● Blender Motor: This unit is located within the motor housing and contains the machinery which runs the blender, including the electric motor, drive train, and computerized control board.

2.2 BLENDER JAR ASSEMBLY
The blender jar assembly consists of the blender jar, blade assembly, and lid. The blender jar assembly integrates these components to ensure consistently blended drinks and greater operator safety.

● Jar: Made from polycarbonate to provide maximum performance as well as clear visibility of blender performance.

● Blade Assembly: Stainless steel, designed to ensure fast, consistent blending.

● Lid: Designed to provide ease of handling and quick removal for high speed operations.

2.3 OPTIONAL SOUND ENCLOSURE
The sound enclosure reduces noise created during blender operation.

2.4 OPTIONAL SOUND ENCLOSURE BOTTOM
A “top-of-the-counter” version of the blender is created by combining the sound enclosure described above with a sound enclosure bottom into which the blender motor is inserted. This allows for portable operation of the blender.

2.5 POWER SPECIFICATIONS

Blendtec Blenders are made with power specifications listed below according to your specific model.

110/**120 VOLT BLENDTEC BLENDERS ARE REQUIRED TO BE PROTECTED BY A DEDICATED 20 AMP CIRCUIT BREAKER OR FUSE.**

MODEL (110/120 VOLT)	AMPS	WATTS
ICB7 (Smoother20)	20	2400
ICB5 (Smoother18)	18	2000
ICB4 (Smoother15, SpaceSaver15)	15	1800
ICB3 (Smoother13, SpaceSaver13)	13	1500
ABC5 (ABC18)	18	2000
ABC4 (ABC15)	15	1800
ABC3 (ABC13)	13	1500

220/240 VOLT BLENDTEC BLENDERS ARE REQUIRED TO BE PROTECTED BY A DEDICATED 13 AMP CIRCUIT BREAKER OR FUSE.

MODEL (220/240 VOLT)	AMPS	WATTS
ICB5 (Smoother18)	9	2000
ICB3 (Smoother13, SpaceSaver13)	6.5	1500
ABC5 (ABC18)	9	2000
ABC3 (ABC13)	6.5	1500

SECTION 3: UNPACKING

SAVE THE TWO FOAM INSERTS AND ALL PACKAGING FOR FUTURE STORAGE OR SHIPPING. SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.

3.1 UNPACKING YOUR BLENDER

1. You should have received the following items:
    - Model ICB or ABC Blender Base
    - Blender Jars (2 each) with Lids (2 each)
    - Polycarbonate Sound Enclosure (optional)
    - Additional Blender Jars (optional)

2. Remove blender motor, polycarbonate sound enclosure components, blender jars and lids from carton.

3. Unwind the power cord.

4. Check for and remove any packing material which may have blocked ventilation holes in either the power unit or the black motor stand.

5. Inspect all items to ensure no damage occurred in shipment.

6. If any damage has occurred contact your Blendtec service agent immediately.

3.2 RECORDING YOUR SERIAL NUMBER AND DATE OF SHIPMENT

Record your blender base serial number and date of purchase in the space below. You will need these when contacting Blendtec for service.

Blender Serial # _____

Date of Purchase _____

Refer to these whenever contacting your Blendtec service agent.

SECTION 4: INSTALLATION

4.1 Above Counter Installation

(For SpaceSaver model, disregard mention of polycarbonate sound enclosure)

1. Insure that an electrical receptacle is readily accessible when you locate the equipment.

2. Be sure the unit is switched off and unplugged. Remove the lid (top) of the sound enclosure by either sliding the piano hinge pin out of the hinges. (For the Q Series model, lift the top straight off the bottom to remove.) Lay the polycarbonate sound enclosure top and the hinge pin aside.

3. Route the power cord from the top through the bottom of the clear sound enclosure bottom and insert the motor carefully into the opening in the bottom of the sound enclosure base. Be sure the rubber gasket fits smoothly and tightly into the plastic base.

4. Slide the power cord and the motor into the black plastic sound enclosure base with the touch pad facing the front, fitting the motor and clear sound enclosure bottom snugly into the black base. Extend the cord out the bottom of the base to its full length.

5. Set the equipment on the counter and re-install the clear sound enclosure top.

6. Insure clearance above the counter around the installation to allow for unhampered operation of the sound enclosure.

4.2 Preparation for In-Counter Installations

1. Identify desired blender location. Consider preferences such as proximity to ingredients, how close you want to be to customers, and available counter space.

2. Ensure potential site meets all dimensional requirements. (See Figures 3.1-3.3.)

- Counter top can be no thicker than 3/4 in (19 mm). A counter top thicker than 3/4 in. (19 mm) will obstruct ventilation louvers on the upper sides of the motor.
- If installing more than one blender, allow 14 to 16 in. (356 - 406 mm) center-to-center blender spacing.
- If installing a sound enclosure, allow a clearance of at least 8 1/2 in. (216 mm) from the sound enclosure to the wall and 26 in. (660 mm) from the counter top to any over-the-counter cabinetry.
- Ensure lower cabinetry allows adequate airflow. There should be at least 8 1/8 in. (205 mm) from the counter top to the next lower shelf of the cabinet, leaving a minimum space of 3 in. (76 mm) between the bottom of the motor and the lower shelf. Cabinetry should not be closed, but should allow free flow of air from outside to inside cabinet space.

NOTE: The blender unit draws ambient air into the louvers located on the bottom of the motor. It then evacuates hot air through the louvers located on the upper sides of the motor. Ensure a sufficient amount of air circulates beneath the motor to allow cooling. Hot air should not be trapped beneath the counter top. Plastic bags, cups, etc. should not be stored closer than 3 inches (76mm) from the bottom of the motor.

3. Cut a hole in the counter top 4 3/8 in. (111 mm) wide and 5 7/8 in. (149 mm) long with the shorter side facing the operator (See Figure 4). **Make sure all space requirements and measurements are correct BEFORE cutting.**

4.3 In-Counter Installation

(For SpaceSaver model, disregard mention of polycarbonate sound enclosure)

1. Insure that an electrical receptacle is readily accessible when you locate the equipment.

2. Remove the clear sound enclosure lid (top) by sliding the piano hinge pin out of the hinges. (For Q Series models, simply lift the top portion of the sound enclosure off.) Place the clear sound enclosure bottom on the counter making sure the hole in the bottom of the sound enclosure is aligned with the hole in the counter top.

3. Thread the power cord through the base of the sound enclosure and the counter top hole being careful not to scratch or damage the enclosure.

4. Gently place the motor into the sound enclosure and slide it into the hole in the counter top. Make sure the LCD indicator and touch pad are facing the operator's side of the counter. Also insure that the rubber gasket on the motor fits snugly and evenly into the sound enclosure and counter top holes.

5. Carefully re-install the sound enclosure lid using the stainless steel hinge pin. Never drop or slam enclosure lid.

6. Plug the unit into a receptacle with appropriate protection. Make sure power switch is turned off before plugging unit in.

SECTION 5: OPERATING INSTRUCTIONS

5.1 OPERATIONAL OVERVIEW

1. Raise the enclosure lid. If blender is not turned on, turn on the main power switch located on the front of the blender motor.

2. Place the properly filled blender jar on the motor, making sure the jar is seated all the way down and jar lid is secured tightly on the jar.

3. Press the button on the touchpad of your desired blender cycle.

5.2 AUTOMATIC CYCLE OPERATION

If not otherwise specified, Blendtec blenders are programmed to the default Multipurpose blender program. See the Blendtec Cycle Chart included with this manual for details regarding programming and operation of your blender. This chart can also be found online at blendtec.com.

5.3 MANUAL OPERATION

Pulse Button: Blends mixture at a constant HIGH speed (70 percent power) while button is depressed. Generally this is the last button on the far right of the blender touchpad and is indicated by the letter “P”. This button is normally used for additional blending once a programmed cycle has already been used.

5.4 TROUBLESHOOTING SUGGESTIONS

BLENDER MOTOR WILL NOT TURN ON: If the blender motor will not turn on, try the following:

- Make sure the main power switch on the lower-front panel is turned on.
- Check the house current breaker switch or fuse to make sure it is set to the on position.
- Unplug, then re-plug in the power cord.
- Determine if the numbers on the Liquid Crystal Display (LCD) indicator are lighted. An absence of lighted LCD indicates a lack of power to the microprocessor.
- Check the LCD:

A reading of “OVERTEMP” indicates an overheated condition has been detected and the motor has been disabled until the unit cools to operating temperatures. Unplug motor and allow motor to cool for at least 20 minutes.

A reading of “OVERLOAD” indicates an overload on the motor. Turn the motor off for 10 seconds (using the switch) then turn the motor on again to clear the overload condition. Check the blender jar for blockage.

A reading of “LOW VOLTAGE” indicates not enough voltage coming to the motor. Turn the motor off. Correct the cause of low voltage. (Normally caused by more than one appliance drawing power on the same circuit, or by low power from a power source {brown out}.) Turn the motor on again and continue operations.

BLADE STOPS: If the overload switch stops the blender, remove the blender jar and carefully check for blockage of the blade. If no blockage is found, replace jar and use the “pulse” button on the touch pad to quickly pulse the blade through the mixture. Once the blade spins freely, a programmed button may be used.

NOISE LEVEL CHANGES: If the blender noise level has increased significantly from original levels, determine whether the sound is coming from the motor or jar.

● Motor: Check to see if the excess noise is coming from the motor. Remove the jar from the base and press cycle number one. Listen to the motor sound without a jar attached. If it is excessively noisy, contact your Blendtec service center.
● Jar: Check to see if the excess noise is coming from the jar. Place the jar back on the base. Run the motor for a few seconds using the “P” button. Switch jars back and forth to determine whether the sound changes as different jars are used. If a jar is excessively noisy, or if the blade assembly seems loose or sounds “gravelly” when turned by hand, contact your Blendtec service center for assistance.

BLENDED TEXTURE UNSATISFACTORY: If the blended texture of product is lumpy or uneven, do the following:

● Make sure the mixture is not cavitating during the cycle. Cavitation is a condition in which the blender blade spins freely in an air pocket within the drink mix because the mix is too cold or too solid. This problem can be corrected by increasing the mix temperature (by reducing ice, increasing liquid and/or insuring that the frozen ingredients used in the recipe are never colder than 10 degrees Fahrenheit or -12 degrees Celsius). When the right combination of correctly tempered ingredients is used, the resulting drink is always smooth, thick and blendable without operator attention.

● Increase cycle time. If the drink is mixing well but has not had enough time for complete blending, try a longer cycle (usually by using a higher button number to start the blender) or touch and hold the “Pulse” button for required extra blending time.

● Make sure the drive shaft on the jar is fully engaged into the drive socket or that the blade is firmly affixed to the drive shaft.

TRIED EVERYTHING? If none of the preceding suggestions work, contact your Blendtec service agent for further assistance.

5.5 CLEAN BLENDER JAR DAILY

1. Using hot tap water, add 4 cups (1liter) of water and 1 1/2 teaspoons (7 ml) of liquid dish washing soap to the blender jar.

2. Place the lid tightly onto the jar. Place the blender jar on the motor and press the “pulse” button for 15 seconds.

3. Rinse with clear water until all soap is rinsed from jar and lid.

4. Store the jar right side up wherever possible. If jars are stored upside down, insure that no water is allowed to stand in the bottom around the blade drive shaft.

5. 64 ounce jars may be stacked one inside the other, but insure that the handles are alternated. NEVER STACK THESE JARS WITH HANDLES INTERLOCKED! 96 ounce jars can only be stacked by interlocking handles.

NOTE: When washing the blender jar in a dishwasher, the jar should be placed on the top rack. Blender jars are dishwasher safe up to 220 degrees Fahrenheit (104 degrees Celsius).

5.6 LONG-TERM SANITATION OF JAR
1. For long-term sanitation, periodically fill the blender jar with hot tap water.

2. Add 1 teaspoon (5 ml) of liquid chlorine bleach.

3. Stir for 10 seconds to mix water and bleach. Let mixture stand in blender jar for 5 minutes.

4. Empty water/bleach mixture. Store jar as described in section 5.5.

5.7 DAILY CLEANING OF MOTOR

1. Make sure the main power switch is off and motor is unplugged before cleaning.

2. Remove motor from sound enclosure. Remove the rubber gasket from the rim of the steel base and wash the gasket with a mild detergent.

3. When necessary, wipe the metal top and sides of the blender motor clean with a damp rag. Mild cleaners like WINDEX® may be used.

5.8 WEEKLY CLEANING OF MOTOR (Done in addition to daily cleaning while motor is unplugged and removed from enclosure)

1. Fill the blender drive socket (see figure 1.2) with a strong cleaning solution such as 409® or Simple Green®. DO NOT OVERFILL. Let stand for 5 minutes.

2. Clean the inside ridges and grooves of drive socket with a toothpick, an ice pick or some other hard, pointed tool.

3. Turn the motor upside down to drain the material from the drive socket. Use a paper towel or rag to dry the area and replace the motor.

5.9 CLEANING TIPS AND CAUTIONS

Do not use abrasives to clean the blender motor, jar, or sound enclosure as this will dull or scratch the surface

● Do not use a water jet of any kind to clean this equipment.

● NEVER submerge the blender motor in water - THIS WILL VOID WARRANTY

● Avoid submerging the blender jars for more than 5 minutes. Water penetration through the lower jar seals will reduce the jar life. When you have cleaned the jar, store it upside down. **Do NOT allow water to stand in the lower seal area.**

● For long term storage of jar, apply a small amount of food-grade oil (such as vegetable oil) to the seals around the blade assembly both inside and outside of the blender jar.

SECTION 6: WARRANTY AND SERVICE PROCEDURE

6.1 WARRANTY DESCRIPTION

MOTOR:
Standard Blendtec United States (US) warranties are as follows:

ABC18, ABC15, ABC13, Smoother20	3 years or 20,000 cycles
Smoother18, Smoother15, Smoother13	2 years or 15,000 cycles
SpaceSaver15, SpaceSaver13	1 year or 10,000 cycles

Standard Blendtec International (outside US) warranties are as follows:

ABC	1 year or 20,000 cycles
Smoother	1 year or 15,000 cycles
SpaceSaver	1 year or 10,000 cycles

JAR:
The polycarbonate jar and internal bearing assembly are warrantied against failure as follows:

Jar Model	Warranty
40-501, 40-502, 40-503	180 days from purchase date
40-505, 40-508	1 year from purchase date

The jar model number can be found under the NSF logo on the jar.

BLADES:
The stainless steel blade are warrantied against breakage for the life of the jar. Please note that dulling of the blade may occur as a result of usage and does not affect blending effectiveness.

SOUND ENCLOSURE:
The polycarbonate sound enclosure is warranted for 90 days against manufacturing defects.

DRIVE SOCKET:
The drive socket (see Fig. 1.2) is warrantied for the life of the machine.

Warranties begin from date of shipment, or on date of purchase where proof of purchase is provided. Cosmetic damage and abuse are not included within this warranty.

6.2 SERVICE PROCEDURE

Should you experience any difficulty in using your Blendtec blender, please do the following:

UNDER WARRANTY

1. Contact your authorized Blendtec service agent immediately to diagnose the difficulty. Please have your serial number ready as well as a description of the problem. Do not attempt to do your own repairs. Repairs made by persons other than Blendtec authorized service representatives will void the warranty. Many issues can be resolved simply and quickly over the phone.

2. If the difficulty cannot be resolved over the phone, your unit may require replacement. If you are under warranty, Blendtec will repair or replace your unit at no cost. Cosmetic damage and abuse are not included.

OUT OF WARRANTY

1. Contact your Blendtec service agent to diagnose the difficulty. Please have your serial number ready along with a description of the problem. Many issues can be resolved simply and quickly over the phone. **Attempting to do your own repairs will void the warranty of your machine.**

2. If you are not under warranty and wish to have your unit repaired, box up your existing unit and ship the unit to your authorized Blendtec service agent. Your Blendtec service agent will bill you for services rendered.

When shipping your blender unit to the service agent (either in warranty or out of warranty), Please include the following:

Name:	
Company:	Store Number:
Address:	
Phone:	
Serial Number: (Found on the underside of the motor)	Cycle Count: (Number on the LCD Screen)
Purchase Date:	Place of Purchase:
Problem Description:	

APPENDIX A: ABC BLENDER OPERATION

A1: Operation

The ABC models features an interlock safety switch that prevents the unit from operating unless the polycarbonate sound enclosure is completely shut. To operate the ABC, press the desired button. A red LED will light up above the button selected and will remain lit until another button is selected or the button is touched a second time during operation. The machine will start the blending cycle once the sound enclosure lid has been closed. Touching any button during the motor operation will stop the blender and de-select the button. Touch the “P” (Pulse) button when the sound enclosure lid is open will deselect all programs. The lid can then be closed without starting a cycle.

A2: Interlock Modes

● **Automatic Interlock Mode:** Equipment is shipped with this selection installed. In this mode the motor **will not operate** unless the sound enclosure lid is closed. The selected program (as indicated by the lighted program button on the touchpad) will start automatically each time the sound enclosure is closed unless the lighted button is pushed again to de-select the program. To restore this interlock mode from either Safety or Manual mode, press the **“P – 1 – 3”** buttons in quick succession.

● **Safety Mode:** In this mode, the motor **will not operate** unless the sound enclosure is closed. The motor **will not** automatically start when the enclosure is closed. A button must be pushed each time the operator wishes to start a drink cycle. To select this mode from Automatic Interlock or Manual mode, press
“5 – 1 – 3” in quick succession.

● **Manual Mode:** In this mode, the safety interlock is disabled and the blender motor will start any time a button is pressed. To select this mode from Automatic Interlock or Safety mode, press the **“4 – 1 – 3”** buttons in quick succession.

APPENDIX B - PRODUCT DIAGRAMS

FIGURE 1.1 - FRONT VIEW: BLENDER MOTOR AND JAR

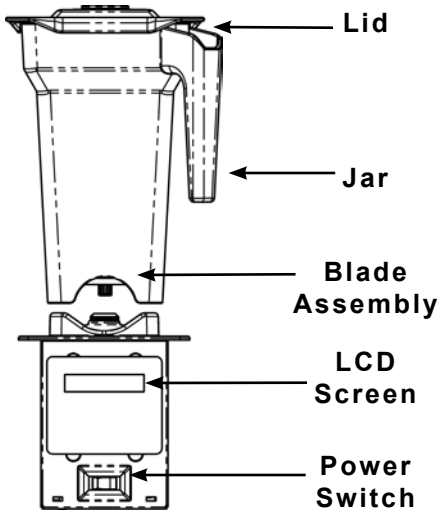


FIGURE 1.2 - TOP VIEW: MOTOR

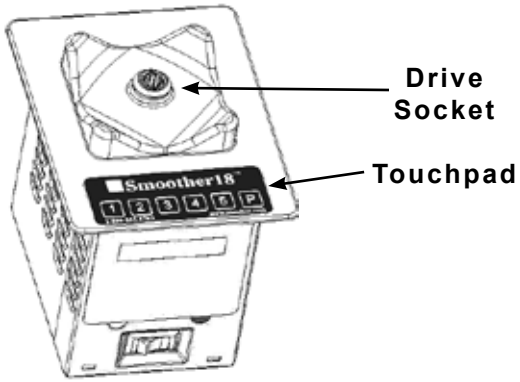


FIGURE 2.1 - ABOVE COUNTERTOP: TITAN, ABC, SMOOTHER

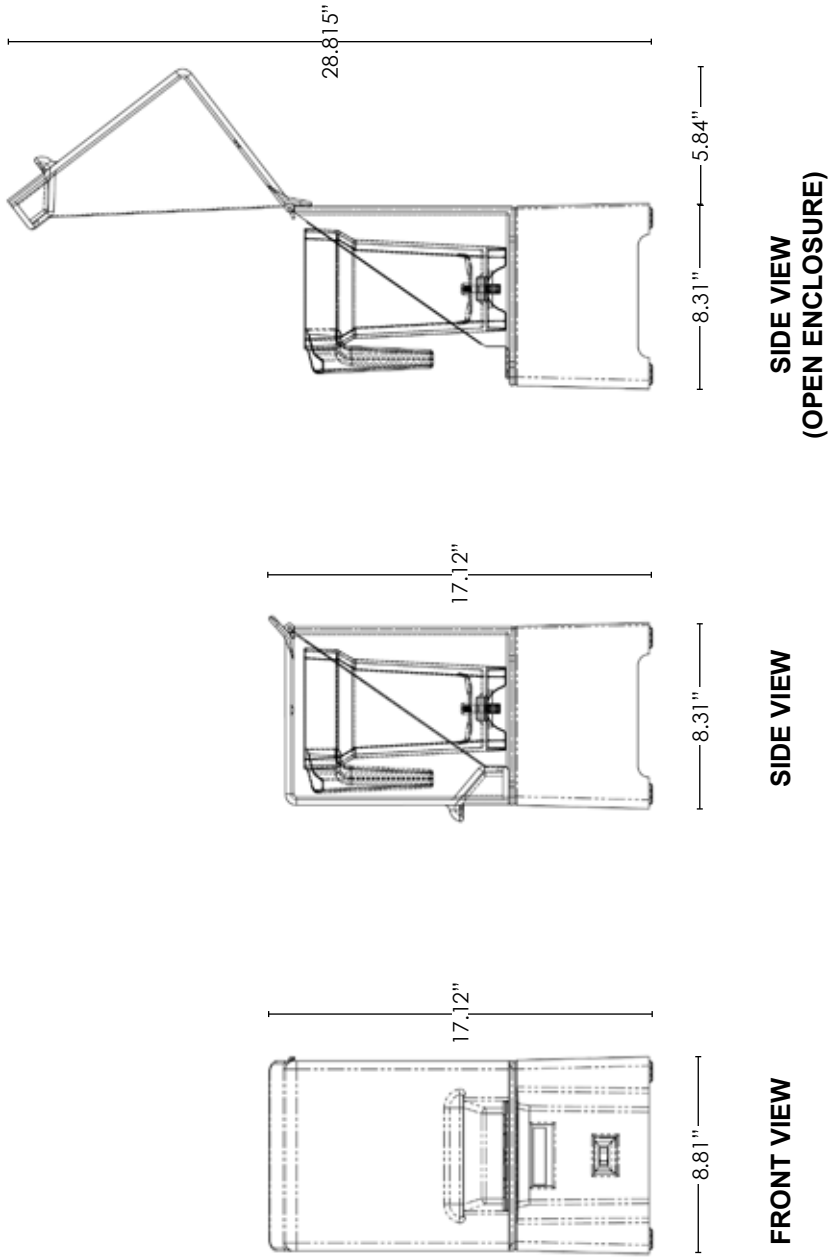


FIGURE 2.2 - ABOVE COUNTERTOP: TITAN, ABC, SMOOTHER (WITH Q SERIES COMPONENTS)

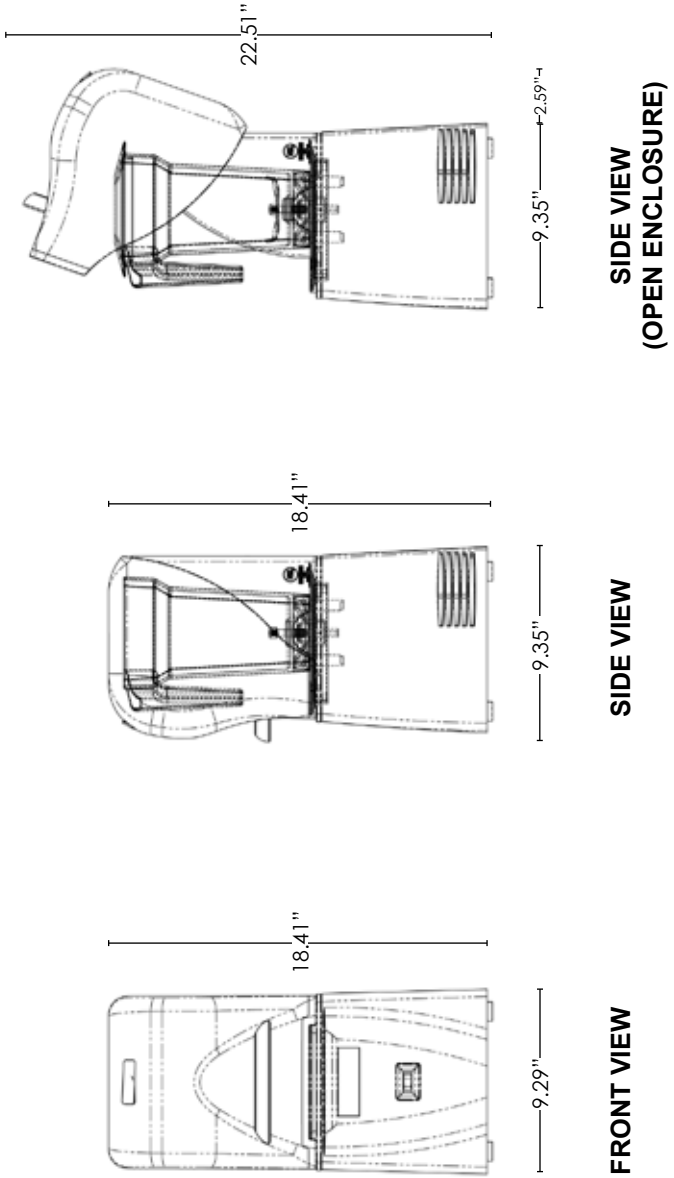


FIGURE 2.3 - ABOVE COUNTERTOP: SPACESAVER

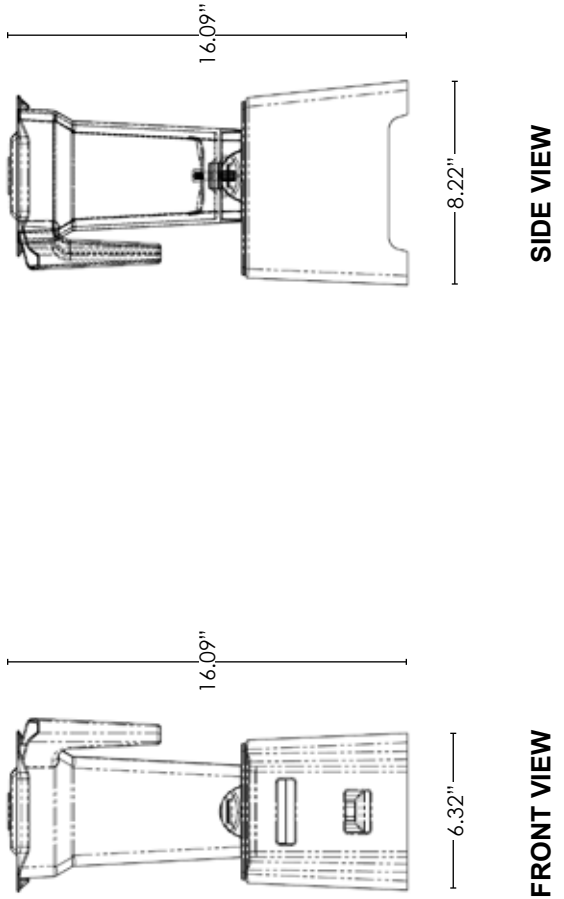


FIGURE 3.1 - IN - COUNTER: TITAN, ABC, SMOOTHER

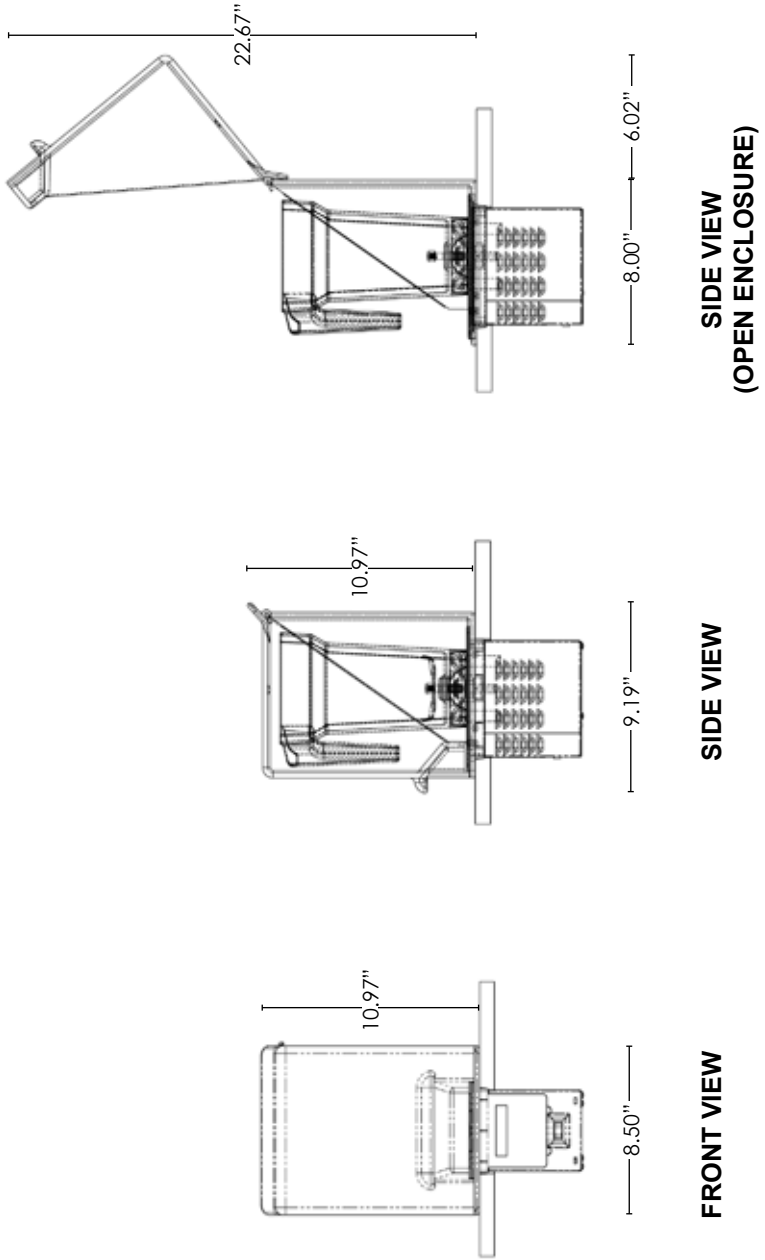


FIGURE 3.2 - IN - COUNTER: TITAN, ABC, SMOOTHER
(WITH Q SERIES COMPONENTS)

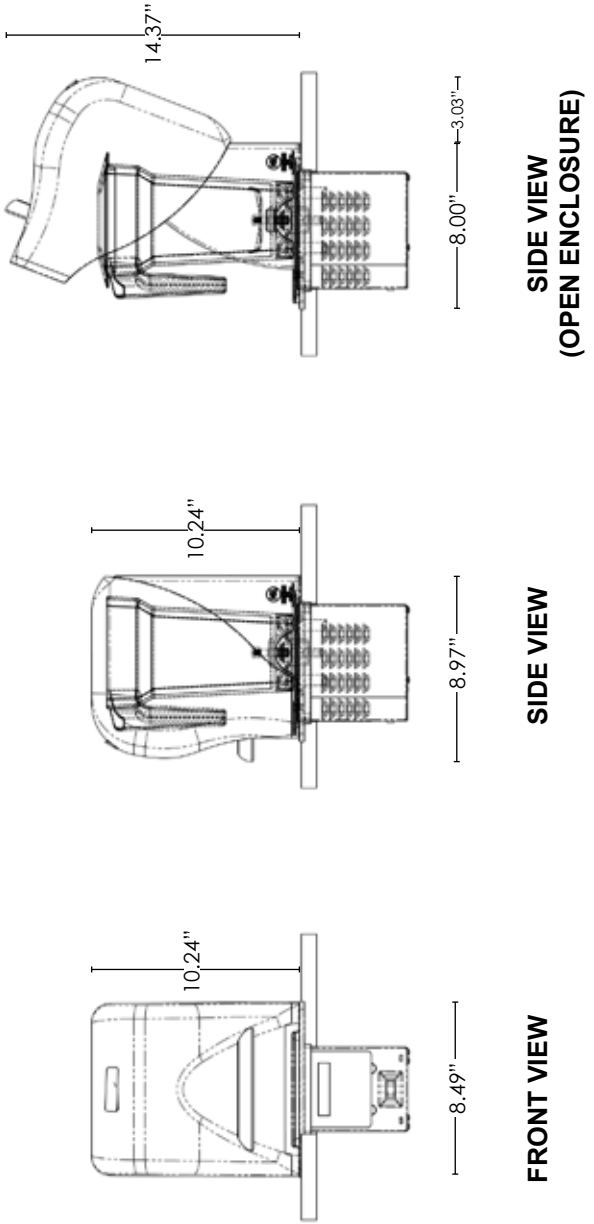
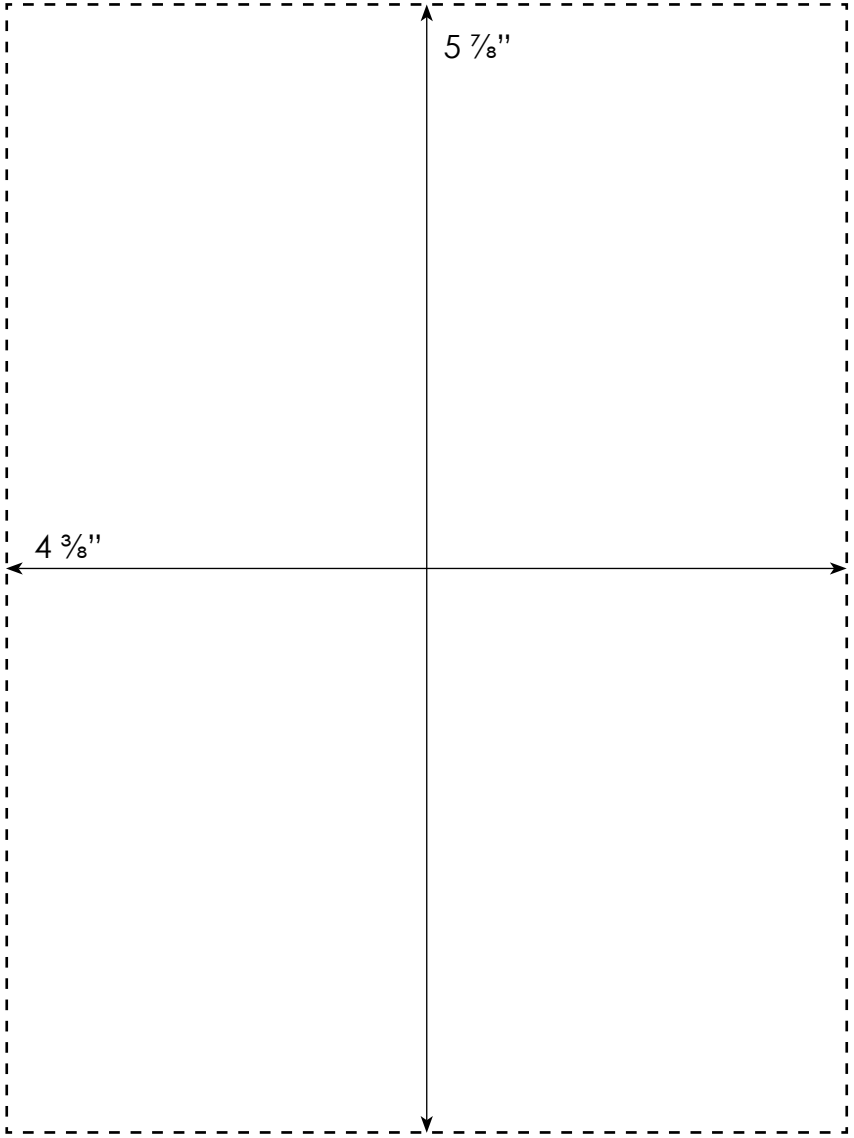


FIGURE 4 - Countertop Hole Template



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